

We claim:

1. A method of manufacturing a plastic encapsulated structural member comprising the steps of:

forming a mold having opposing first and second mold parts which, when mated together, form an enclosed mold defining a cavity therein having a configuration the same as the structural member to be manufactured;

said first and second mold parts each having at least two spaced pins mounted thereon and extending into said cavity when said first and second parts are mated together whereby said at least two pins on said first mold part are in opposed relationship to said at least two pins on said second mold part in said cavity;

forming a core of wood material having a configuration the same as the structural member to be manufactured;

providing at least two holes on each of two opposed surfaces of said core spaced apart a distance equal to a distance between said spaced pins on said first and second mold parts;

positioning said core in said cavity so that said pins on said first and second mold parts engage said holes in said core to hold said core in a position spaced from all surfaces of said cavity;

injecting a formable plastic material and nitrogen under low pressure into said cavity to cause said plastic material to foam up and fill a space between said core and said cavity all around said core;

allowing said foamed plastic material to harden around said core to encapsulate said core with a plastic layer; and

removing said first and second mold parts from said encapsulated core so that said pins are withdrawn from said core to leave said holes exposed.

2. A method of manufacturing a plastic encapsulated structural member according to claim 1 wherein said mold is adjustable in length and the method further includes the step of adjusting the length of said mold to a specified length.

3. A method of manufacturing a plastic encapsulated structural member according to claim 1 wherein said holes are through holes extending through said core.

4. A method of manufacturing a plastic encapsulated structural member according to claim 1 wherein each said pin has a shoulder of a larger diameter than the diameter of a body of said pin and the method further includes the step of forming an outer opening of a larger diameter than the diameter of each of said holes in the core.

5. A method of manufacturing a plastic encapsulated structural member according to claim 1 which further includes the step of forming said plastic layer to a thickness of 1/4 inch to 3/8 inch.

6. A method of manufacturing a plastic encapsulated structural member according to claim 1 which further includes the step of closing each of said holes by inserting a plug of the same plastic material as used to form said plastic layer, into each said hole and securing the plug therein.

7. A method of manufacturing a plastic encapsulated structural member according to claim 4 which further includes the step of closing each of said holes by inserting a plug of the same plastic material as used to form said plastic layer, into said opening of each said hole and securing the plug therein.

8. A method of manufacturing a plastic encapsulated structural member according to claim 7 wherein said plug has a circular ridge on surface thereof and said plug is secured in said opening by a welding process.